REMARKS

By this Amendment, claims 22-23, 28-29, 31 and 37-46 are amended. Claims 24-27, 30 and 32-36 remain in the application. Claims 1-21 were withdrawn from consideration by the Examiner based on the Applicants' election of Species IV in the June 16, 2005 Response. Thus, claims 22-46 are active in the application. Reexamination and reconsideration of the application are respectfully requested.

The specification and abstract have been carefully reviewed and revised in order to correct grammatical and idiomatic errors in order to aid the Examiner in further consideration of the application. The amendments to the specification and abstract are incorporated in the attached substitute specification and abstract. No new matter has been added.

Also attached hereto is a marked-up version of the substitute specification and abstract illustrating the changes made to the original specification and abstract.

In item 2 on page 2 of the Office Action, claim 22 was objected to for containing the phrase "comprising the steps for." Claim 22 has been amended to recite "said method comprising," as kindly suggested by the Examiner. Furthermore, the phrase "steps for" has been deleted from dependent claims 23, 29, 31, 37-39 and 42-46. Accordingly, the Applicants respectfully request the Examiner to withdraw the objection to claim 22.

In item 4 on pages 2-3 of the Office Action, claims 43-46 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention.

Claims 43-46 have each been amended in order to overcome this rejection. In particular, claim 43 has been amended to recite "wherein the radiation curable resin is applied to the first substrate by a spin coating method," and claim 45 has been amended to recite "wherein the second radiation curable resin is applied to the second substrate by a spin coating method." The Applicants note that these amendments to claims 43 and 45 are identical to the amendments kindly proposed by the Examiner, except that the underlined terms have been substituted for the Examiner's suggested terms in order to use consistent terminology throughout the claims. Furthermore, claims 44 and 46 have been amended to provide proper antecedent basis for the limitation "closing the center hole."

In view of the amendments to claims 43-46, the Applicants respectfully submit that claims 43-46 are now clearly definite by particularly pointing out and distinctly claiming the subject matter which the Applicants regard as the invention. Accordingly, the Applicants respectfully request the Examiner to withdraw the rejection of claims 43-46 under 35 U.S.C. § 112, second paragraph.

In item 6 on page 3 of the Office Action, claims 22-23, 25-29, 31-36, 40-43 and 45 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Maruyama et al. (U.S. 6,136,133) in view of Ohno et al. (U.S. 6,613,170). This rejection is respectfully traversed for the following reasons.

The present invention provides a manufacturing method for an optical data recording medium. The manufacturing method of the present invention comprises preparing a first substrate, and coating the first substrate with a radiation curable resin. Furthermore, the method comprises curing the radiation curable resin in part, and preparing a second substrate having a groove or lands and pits on one side. In addition, the method of the present invention comprises disposing a resin material to the side of the second substrate having the groove or the lands and pits, and pressing the radiation curable resin of the first substrate and the resin material of the second substrate together.

Accordingly, the present invention provides that the radiation curable resin coated to the first substrate is partially cured before the pressing operation, when the first substrate is stopped. For instance, as described in line 20 on page 36 to line 4 on page 37 of the original specification (line 20 on page 36 to line 4 on page 37 of the substitute specification), the present invention provides:

> If the substrates are put together with the entire surface of both radiation curable resins A and B uncured, the pressure applied to the radiation curable resin may vary in places due to the two substrates not being perfectly parallel and force being applied unequally. This can result in the thickness of the radiation curable resin changing greatly in parts.
>
> However, if the part of radiation curable resin A inside the specified radius is first cured as described above, the thickness of the cured part of the resin A can no longer change. Any change in thickness that might occur when the two substrates are combined is therefore extremely small, and a uniform resin thickness can be easily achieved. (emphasis added)

Accordingly, the present invention thus provides that the radiation curable resin coated on the first substrate is partially cured before the radiation curable resin of the first substrate and the resin material of the second substrate are pressed together, when the first substrate is stopped.

Claim 22 recites this novel feature of the present invention. In particular, the method of claim 22 is recited as comprising coating the first substrate with a radiation curable resin, and curing the radiation curable resin in part.

On page 4 of the Office Action, the Examiner acknowledged that Maruyama et al. does not disclose or suggest that the two substrates are pressed together after partially curing a radiation curable resin that is coated to one of the first substrates.

The Examiner asserted that Ohno et al. discloses partially curing a radiation curable resin 211, but the Examiner acknowledged that Ohno et al. does not disclose partially curing the radiation curable resin before first and second substrates are laminated together.

Nonetheless, the Examiner, without citing a reference to support his conclusory assertion, opined that it would have been obvious to modify Ohno et al. to partially cure a radiation curable resin before the first and second substrates of Ohno et al. are laminated together. The Examiner asserted that this modification of Ohno et al. is conceivable because Ohno et al. discloses that partially curing a radiation curable resin increases the thickness uniformity of the resin layer. The Applicants respectfully submit that this modification of Ohno et al. is not supported by the disclosure of Ohno et al.

As noted above, the specification of the present invention provides that "if the substrates are put together with the entire surface of both radiation resins A and B uncured, the pressure applied to the radiation curable resin may vary in places due to the two substrates not being perfectly parallel and force being applied unequally." Ohno et al., however, as acknowledged by the Examiner, discloses laminating the first and second substrates together before the radiation curable resin is partially cured. Accordingly, the above quotation from the specification corresponds to the invention of Ohno et al. before curing is performed.

In particular, Ohno et al. discloses a method of manufacturing an optical information recording medium, where the method includes irradiating the inner region, while rotating the first and second substrates after the first and second substrates are laminated. The invention of Ohno et al. does not even contemplate partially curing a radiation curable resin before the first and second substrates are laminated together, because, as disclosed in Ohno et al., "when the substrates 1 and 2 are rotated at a high speed by the motor 150, UV rays 8 are irradiated by a UV lamp 6 only to a UV irradiation region 10, i.e., a region of the substrate 2, which is disposed radially inwardly of an innermost peripheral position for stopping diffusion of the UV cure resin 11." (See Column 7, lines 10-13). Accordingly, Ohno et al. clearly provides that partial curing of an radiation curable resin has to be performed while rotating the first and second substrates, after the first and second substrates are laminated together.

Thus, even if Ohno et al. supported the Examiner's hindsight-motivated modification of Ohno et al., which it does not, the invention of claim 22 cannot be obtained since the conditions for partially curing a radiation curable resin are markedly different between Ohno et al. and the present invention. As noted above, the present invention provides that "if the part of radiation curable resin A inside the specified radius is first cured as described above, the thickness of the cured part of the resin A can no longer change." Ohno et al., on the other hand, does not contemplate ensuring the uniform thickness of the radiation curable resin coated on the first substrate, because Ohno et al. discloses partially curing the radiation curable resin after both the first and second substrates are laminated together.

Accordingly, the disclosure of Ohno et al. cannot be modified to support the Examiner's conclusion that it would have been obvious to partially cure a radiation curable resin before first and second substrates are pressed together. Furthermore, Ohno et al. does not disclose any motivation or suggestion to substantially modify its invention to partially cure a radiation curable resin before first and second substrates are pressed together.

For prima facie obviousness under 35 U.S.C. § 103(a), the references must suggest the invention. The Examiner is respectfully reminded that an obviousness rejection cannot be based on the resort of the Examiner to various references and the

combination of bits and pieces of the references in light of the Applicants' claimed invention. An extensive discussion of the criteria to be applied in obviousness rulings is set forth in In re Gordon, 733 F.2d 900, 902, 221 U.S.P.Q. 1125, 1127 (Fed Cir. 1984), which clearly states the long-held proposition that "the fact that a prior art reference can be modified to show the patented invention does not make the modification obvious unless the prior art reference suggests the desirability of the modification." (emphasis added) An attempted modification of a prior art reference that is unwarranted by the disclosure of that reference is thus improper. Accordingly, the Examiner must make a showing that the combination of two or more references was suggested by the references.

Accordingly, no obvious combination of Maruyama et al. and Ohno et al. would result in the invention claim 22 since Maruyama et al. and Ohno et al., either individually or in combination, clearly do not disclose or suggest each and every limitation of claim 22.

Therefore, for at least the foregoing reasons, claim 22 is clearly patentable over Maruyama et al. and Ohno et al. since Maruyama et al. and Ohno et al., either individually or in combination, fail to disclose each and every limitation of claim 22.

In item 7 on page 7 of the Office Action, claims 22-36, 40-43 and 45 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Maruyama et al. in view of Amo (U.S. 5,888,433). This rejection is respectfully traversed for the same reasons above.

Similar to Maruyama et al. and Ohno et al., Amo also fails to disclose or suggest partially curing a radiation curable resin before the first and second substrates are pressed together.

In particular, as disclosed in Column 7, lines 7-9 and 63-67 and in Figures 6(C), 7(A) and 7(B), Amo discloses only a temporary fixing step by partial irradiation after laminating two substrates together, and partial irradiation after lamination cannot cause the thickness uniformity of the resin layer to be increased. Furthermore, Amo is subjected to a method for correcting the nonalignment in the center of a storage disc, and therefore, Amo does not disclose, suggest or even contemplate any motivation to change the timing of partially curing a radiation curable resin to before the first and second substrates are laminated.

Accordingly, Amo et al., similar to Maruyama et al. and Ohno et al., also clearly does not disclose or suggest partially curing a radiation curable resin before the first and second substrates are pressed together, as recited in claim 7.

Therefore, no obvious combination of Maruyama et al. and Amo et al., as well as Ohno et al., would result in the invention of claim 22 since Maruyama et al., Amo et al. and Ohno et al. each fail to disclose or suggest each and every limitation of claim 22.

Accordingly, claim 22 is clearly patentable over Maruyama et al. and Amo et al., in addition to being patentable over Maruyama et al. and Ohno et al.

In item 8, on page 9 of the Office Action, claims 37-40 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Maruyama et al. in view of Amo and further in view of Ohki et al. (U.S. 5,708,652). Further, in item 9 on page 10 of the Office Action, claims 44 and 46 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Maruyama et al. in view of Amo and further in view of Komaki et al. (U.S. Patent Application Publication No. 2001/0053121).

As demonstrated above, Maruyama et al., Ohno et al. and Amo, either individually or in combination, clearly fail to disclose or suggest partially curing a radiation curable resin before the first and second substrates are pressed together, as recited in claim 7.

Similarly, Ohki et al. and Komaki et al. also fail to disclose or suggest partially curing a radiation curable resin before the first and second substrates are pressed together, as recited in claim 7. Therefore, Ohki et al. and Komaki et al. fail to cure the deficiencies of Maruyama et al., Ohno et al. and Amo for failing to disclose or suggest each and every limitation of claim 7.

Because of the clear distinctions discussed above, it is submitted that the teachings of Maruyama et al., Ohno et al., Amo, Ohki et al. and Komaki et al. clearly do not meet each and every limitation of claim 22.

Furthermore, it is submitted that the distinctions discussed above are such that a person having ordinary skill in the art at the time the invention was made would not have been motivated to modify Maruyama et al., Ohno et al., Amo, Ohki et al. and Komaki et al. in such as manner as to result in, or otherwise render obvious, the present invention as recited in claim 22.

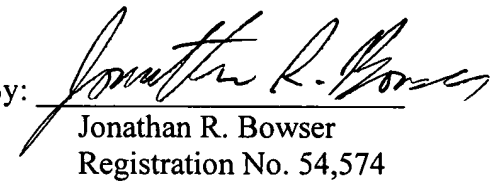
Therefore, it is submitted that the claim 22, as well as claims 23-46 which depend therefrom, are clearly allowable over the prior art as applied by the Examiner.

In view of the foregoing amendments and remarks, it is respectfully submitted that the present application is clearly in condition for allowance. An early notice thereof is respectfully solicited.

If, after reviewing this Amendment, the Examiner feels there are any issues remaining which must be resolved before the application can be passed to issue, the Examiner is respectfully requested to contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

Kazuya HISADA et al.

By: 

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